

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/722,903A  
Source: IFUHO  
Date Processed by STIC: 1-3-05

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 01/03/2005

PATENT APPLICATION: US/10/722,903A

TIME: 14:53:52

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\01032005\J722903A.raw

3 <110> APPLICANT: GTC Biotherapeutics, Inc.  
 5 <120> TITLE OF INVENTION: Modified Antibodies Stably Produced in Milk and Methods of  
 6 Producing Same  
 8 <130> FILE REFERENCE: GTC-53  
 10 <140> CURRENT APPLICATION NUMBER: 10/722,903A  
 11 <141> CURRENT FILING DATE: 2003-11-26  
 13 <150> PRIOR APPLICATION NUMBER: US 60/429,606  
 14 <151> PRIOR FILING DATE: 2002-11-27  
 16 <160> NUMBER OF SEQ ID NOS: 11  
 18 <170> SOFTWARE: PatentIn version 3.2  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 2028  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Homo sapiens  
 26 <220> FEATURE:  
 27 <221> NAME/KEY: misc\_feature  
 28 <223> OTHER INFORMATION: Human Ig germline H-chain G-E-A region B: gamma-4 constant  
 29 region, 3' end  
 31 <400> SEQUENCE: 1  
 32 agctttctgg ggcaggccgg gcctgacttt ggctgggggc agggaggggg ctaaggtgac 60  
 34 gcaggtggcg ccagccaggt gcacacccaa tgcccatgag ccagacact ggacctgca 120  
 36 tggaccatcg cggatagaca agaaccgagg ggccctctgc ccctgggccc agctctgtcc 180  
 38 cacaccgagg tcacatggca ccacctctct tgcagcttcc accaagggcc catccgtctt 240  
 40 ccccttggcg ccctgtctca ggagcacctc cgagagcaca gccgccctgg gctgcctggt 300  
 42 caaggactac ttccccgaac cggtgacggt gtcgtggaac tcaggcgccc tgaccagcgg 360  
 44 cgtgcacacc ttccccggtg tcttacagtc ctccaggact tactccctca gcagcgtggt 420  
 46 gaccgtgccc tccagcagct tgggcacgaa gacctacacc tgcaacgtag atcacaagcc 480  
 48 cagcaacacc aaggtggaca agagagttgg tgagaggcca gcacaggagg ggagggtgtc 540  
 50 tgctggaagc caggctcagc cctcctgcct ggacgcaccc cggctgtgca gccccagccc 600  
 52 agggcagcaa ggcattgccc atctgtctcc tcacccggag gcctctgacc acccactca 660  
 54 tgctcaggga gaggggtctt tggatttttc caccaggctc ccggcaccac aggttgatg 720  
 56 cccctacccc aggccttgcg catacagggc aggtgtctgc ctccagacct ccaagagcca 780  
 58 tatccgggag gacctgccc ctgacctaaag cccaccccaa aggccaaact ctccactccc 840  
 60 tcagctcaga caccttctct cctcccagat ctgagtaact cccaatcttc tctctgcaga 900  
 62 gtccaaatat ggtcccccat gcccatcatg ccaggttaag ccaaccagg cctcgccctc 960  
 64 cagctcaagg cgggacaggt gccctagagt agcctgcata caggggacagg cccagccgg 1020  
 66 gtgctgacgc atccacctcc atctcttctt cagcaoctga gttcctgggg ggaccatcag 1080  
 68 tcttctgtt cccccaaaa cccaaggaca ctctcatgat ctcccgacc cctgaggtca 1140  
 70 cgtgcgtggt ggtggacgtg agccaggaag accccagagt ccagttcaac tggtagctg 1200  
 72 atggcgtgga ggtgcataat gccaaagaca agccgcggga ggagcagttc aacagcacgt 1260  
 74 accgtgtggt cagcgtcttc accgtcctgc accaggactg gctgaacggc aaggagtaca 1320  
 76 agtgcaaggt ctccaacaaa ggctcccggt cctccatcga gaaaaccatc tccaaagcca 1380  
 78 aaggtgggac ccacggggtg cgagggccac acggacagag gccagctcgg cccacctct 1440

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80 gccctgggag tgaccgctgt gccaacctct gtccctacag ggcagccccg agagccacag 1500
82 gtgtacaccc tgcccccatc ccaggaggag atgaccaaga accaggtcag cctgacctgc 1560
84 ctgggtcaaag gcttctaccc cagcgacatc gccgtggagt gggagagcaa tgggcagccg 1620
86 gagaacaact acaagaccac gcctcccgtg ctggactccg acggctcctt cttcctctac 1680
88 agcaggctaa ccgtggacaa gagcagggtg caggagggga atgtcttctc atgctccgtg 1740
90 atgcatgagg ctctgcacaa ccactacaca cagaagagcc tctccctgtc tctgggtaaa 1800
92 tgagtgccag ggccggcaag cccccgtcc cggggctctc ggggtcgcgc gaggatgctt 1860
94 ggcacgtacc ccgtctacat acttcccagg caccagcat ggaaataaag caccaccac 1920
96 tgccctgggc ccctgtgaga ctgtgatggt tctttccacg ggtcaggccg agtctgaggc 1980
98 ctgagtgaca tgagggaggc agagcgggtc ccactgtccc cacactgg 2028
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102 <211> LENGTH: 61
103 <212> TYPE: DNA
104 <213> ORGANISM: Homo sapiens
107 <220> FEATURE:
108 <221> NAME/KEY: misc_feature
109 <223> OTHER INFORMATION: IgG4 Hinge Region Nucleic Acid
111 <400> SEQUENCE: 2
112 tctgcagagt ccaaatatgg tcccccatgc ccatcatgcc caggtaagcc aaccaggcc 60
114 t 61
117 <210> SEQ ID NO: 3
118 <211> LENGTH: 12
119 <212> TYPE: PRT
120 <213> ORGANISM: Homo sapiens
123 <220> FEATURE:
124 <221> NAME/KEY: misc_feature
125 <223> OTHER INFORMATION: IgG4 Hinge Region Amino Acid
127 <400> SEQUENCE: 3
129 Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro
130 1 5 10
133 <210> SEQ ID NO: 4
134 <211> LENGTH: 33
135 <212> TYPE: DNA
136 <213> ORGANISM: artificial sequence
139 <220> FEATURE:
140 <221> NAME/KEY: misc_feature
141 <223> OTHER INFORMATION: S241P Oligo Nucleic Acid
143 <400> SEQUENCE: 4
144 ggtcccccat gtctctccctg cccaggtaag cca 33
147 <210> SEQ ID NO: 5
148 <211> LENGTH: 11
149 <212> TYPE: PRT
150 <213> ORGANISM: artificial sequence
153 <220> FEATURE:
154 <221> NAME/KEY: misc_feature
155 <223> OTHER INFORMATION: S241P Oligo Amino Acid
157 <400> SEQUENCE: 5
159 Gly Pro Pro Cys Pro Pro Cys Pro Gly Lys Pro
160 1 5 10

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163 <210> SEQ ID NO: 6
164 <211> LENGTH: 65
165 <212> TYPE: DNA
166 <213> ORGANISM: Homo sapiens
169 <220> FEATURE:
170 <221> NAME/KEY: misc_feature
171 <223> OTHER INFORMATION: IgG4 Hinge Region Nucleic Acid
173 <400> SEQUENCE: 6
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176 caggc                                                                    65
179 <210> SEQ ID NO: 7
180 <211> LENGTH: 12
181 <212> TYPE: PRT
182 <213> ORGANISM: Homo sapiens
185 <220> FEATURE:
186 <221> NAME/KEY: misc_feature
187 <223> OTHER INFORMATION: IgG4 Hinge Region Amino Acid
189 <400> SEQUENCE: 7
191 Glu Ser Lys Tyr Gly Pro Pro Cys Pro Ser Cys Pro
192 1          5          10
195 <210> SEQ ID NO: 8
196 <211> LENGTH: 65
197 <212> TYPE: DNA
198 <213> ORGANISM: Homo sapiens
201 <220> FEATURE:
202 <221> NAME/KEY: misc_feature
203 <223> OTHER INFORMATION: IgG2 Hinge Region Nucleic Acid
205 <400> SEQUENCE: 8
206 cttctctctg cagagcgcaa atgttgtgtc gagtgcccac cgtgcccagg tccgccaacc      60
208 caggc                                                                    65
211 <210> SEQ ID NO: 9
212 <211> LENGTH: 12
213 <212> TYPE: PRT
214 <213> ORGANISM: Homo sapiens
217 <220> FEATURE:
218 <221> NAME/KEY: misc_feature
219 <223> OTHER INFORMATION: IgG2 Hinge Region Amino Acid
221 <400> SEQUENCE: 9
223 Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro
224 1          5          10
227 <210> SEQ ID NO: 10
228 <211> LENGTH: 33
229 <212> TYPE: DNA
230 <213> ORGANISM: artificial sequence
233 <220> FEATURE:
234 <221> NAME/KEY: misc_feature
235 <223> OTHER INFORMATION: Oligo 2014 Nucleic Acid
237 <400> SEQUENCE: 10
238 gaggagcagt tccagtctac ttaccgagtg gtc                                33

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241 <210> SEQ ID NO: 11  
242 <211> LENGTH: 11  
243 <212> TYPE: PRT  
244 <213> ORGANISM: artificial sequence  
247 <220> FEATURE:  
248 <221> NAME/KEY: misc\_feature  
249 <223> OTHER INFORMATION: Oligo 2014 Amino Acid  
251 <400> SEQUENCE: 11  
253 Glu Glu Gln Phe Gln Ser Thr Tyr Arg Val Val  
254 1 5 10

**VERIFICATION SUMMARY**

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